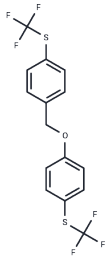
Data Sheet (Cat.No.T61678)

TargetMol

MY10

Chemical Properties



CAS No. : 2204270-73-3

Formula: C15H10F6OS2

Molecular Weight: 384.36

Storage: Keep away from direct sunlight,Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	MY10, a potent and orally active inhibitor of the receptor protein tyrosine phosphatase (RPTPβ/ζ), effectively reduces binge-like ethanol consumption and diminishes the rewarding effects of ethanol.
Targets(IC50)	NF-κB,ALK,c-Met/HGFR,Phosphatase
In vivo	MY10 (20, 60, 100 mg/kg; oral gavage; 3 days; rat) reduced alcohol consumption in the alcohol operant self-administration paradigm (p = 0.040). In the DID-MSA paradigm, rats drank significantly less alcohol (p = 0.019) and showed a significant decrease in alcohol preference (p = 0.002). We observed that the longer the exposure to alcohol, the greater the suppressing effects of MY10 on alcohol consumption. It was demonstrated that the effects of MY10 were specific to alcohol since saccharin intake was not affected by MY10 (p = 0.804). MY10 prevented the alcohol-induced down-regulation of Ptprz1 (p = 0.004) and anaplastic lymphoma kinase (Alk; p = 0.013) expression.[2]

Solubility Information

Solubility	DMSO: 45 mg/mL (117.08 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6017 mL	13.0086 mL	26.0173 mL
5 mM	0.5203 mL	2.6017 mL	5.2035 mL
10 mM	0.2602 mL	1.3009 mL	2.6017 mL
50 mM	0.052 mL	0.2602 mL	0.5203 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Fernández-Calle R, et al. Pharmacological inhibition of Receptor Protein Tyrosine Phosphatase β/ζ (PTPRZ1) modulates behavioral responses to ethanol. Neuropharmacology. 2018;137:86-95.
Calleja-Conde J, et al. Inhibition of Receptor Protein Tyrosine Phosphatase β/ζ Reduces Alcohol Intake in Rats. Alcohol Clin Exp Res. 2020;44(5):1037-1045.